

City of San Marcos

630 East Hopkins San Marcos, TX 78666

Work Session - Final-Amended City Council

Wednesday, November 6, 2019

3:00 PM

City Council Chambers

630 E. Hopkins - Work Session

- I. Call To Order
- II. Roll Call
 - Receive a Staff presentation and hold discussion regarding the proposed Parks and Recreation programs and services fees based on cost recovery, the introduction of additional fees, and community event services fees beginning January 1, 2020, and provide direction to the City Manager.
 - 2. Receive a Staff presentation and hold discussion regarding updates on the final two remaining bond projects of the 2017 Bond Election; the relocation of Fire Station #2 and the design and construction of a new Fire Station #6 within the Trace neighborhood, and provide direction to the City Manager.

EXECUTIVE SESSION

- 3. Executive Session in accordance with the following Government Code Section(s):
 - A. Section § 551.071 Consultation with Attorney: to receive a staff briefing and deliberate regarding the creation of Hays County Municipal Utility District No. 8. and to receive a staff briefing and deliberate regarding Martindale ETJ Matters.
 - B. Section §551.087 Economic Development: to receive a staff briefing and deliberate regarding the creation of Hays County Municipal Utility District No. 8.
 - C. Section § 551.074 Personnel Matters: to receive a staff briefing and hold discussion regarding the City Clerk position.
- III. Adjournment.

POSTED ON THURSDAY, OCTOBER 24, 2019 AT 9:00AM

JAMIE LEE CASE, CITY CLERK

IV. ADDENDUM

The following items has been added to the agenda since it was posted on October 24, 2019:

Item #3:

Executive Session in accordance with the following Government Code Section(s):

- A. Section § 551.071 Consultation with Attorney: to receive a staff briefing and deliberate regarding the creation of Hays County Municipal Utility District No. 8. and to receive a staff briefing and deliberate regarding Martindale ETJ Matters.
- B. Section §551.087 Economic Development: to receive a staff briefing and deliberate regarding the creation of Hays County Municipal Utility District No. 8.
- C. Section § 551.074 Personnel Matters: to receive a staff briefing and hold discussion regarding the City Clerk position.

ADDENDUM POSTED ON TUESDAY, OCTOBER 29, 2019 @ 5:00PM

JAMIE LEE CASE, CITY CLERK

Notice of Assistance at the Public Meetings

The City of San Marcos does not discriminate on the basis of disability in the admission or access to its services, programs, or activities. Individuals who require auxiliary aids and services for this meeting should contact the City of San Marcos ADA Coordinator at 512-393-8000 (voice) or call Texas Relay Service (TRS) by dialing 7-1-1. Requests can also be faxed to 855-461-6674 or sent by e-mail to ADArequest@sanmarcostx.gov



City of San Marcos

630 East Hopkins San Marcos, TX 78666

Legislation Text

File #: ID#19-667, Version: 1
AGENDA CAPTION: Receive a Staff presentation and hold discussion regarding the proposed Parks and Recreation programs and services fees based on cost recovery, the introduction of additional fees, and community event services fees beginning January 1, 2020, and provide direction to the City Manager. Meeting date: November 6, 2019
Department: Finance & Parks & Rec
Amount & Source of Funding Funds Required: Click or tap here to enter text. Account Number: Click or tap here to enter text. Funds Available: Click or tap here to enter text. Account Name: Click or tap here to enter text.
Fiscal Note: Prior Council Action: City Council adopted a Fee Policy on June 4, 2019.
<u>City Council Strategic Initiative</u> : [Please select from the dropdown menu below]
Choose an item.
Choose an item.
Choose an item.
Comprehensive Plan Element (s): [Please select the Plan element(s) and Goal # from dropdown menu
below]
☐ Economic Development - Choose an item.
☐ Environment & Resource Protection - Choose an item.
☐ Land Use - Choose an item.
□ Neighborhoods & Housing - Choose an item.
☐ Parks, Public Spaces & Facilities - Choose an item.
☐ Transportation - Choose an item.
□ Not Applicable

File #: ID#19-667, Version: 1

<u>Master Plan</u>: [Please select the corresponding Master Plan from the dropdown menu below (if applicable)] Choose an item.

Background Information:

The June 4, 2019 Fee Policy was based on cost recovery methodology. The implementation plan begins with all Parks & Recreation program/service fees to be proposed based on the new policy.

Council Committee, Board/Commission Action:

Click or tap here to enter text.

Alternatives:

Click or tap here to enter text.

Recommendation:

Finance and Parks & Recreation recommend the adoption of the proposed fees with a January 1, 2020 effective date.



Cost Recovery Worksession November 6, 2019

City of San Marcos | Finance and Parks & Recreation



Staff requests Council direction on proposed assumptions in finalizing Cost Recovery implementation for the Parks & Recreation programs and services and review of proposed fees for community event services.

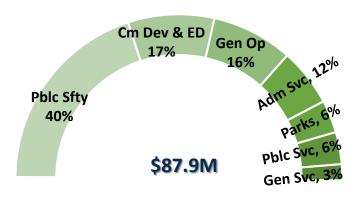
General Fund FY20 Budget



Revenue Sources



Revenue Uses



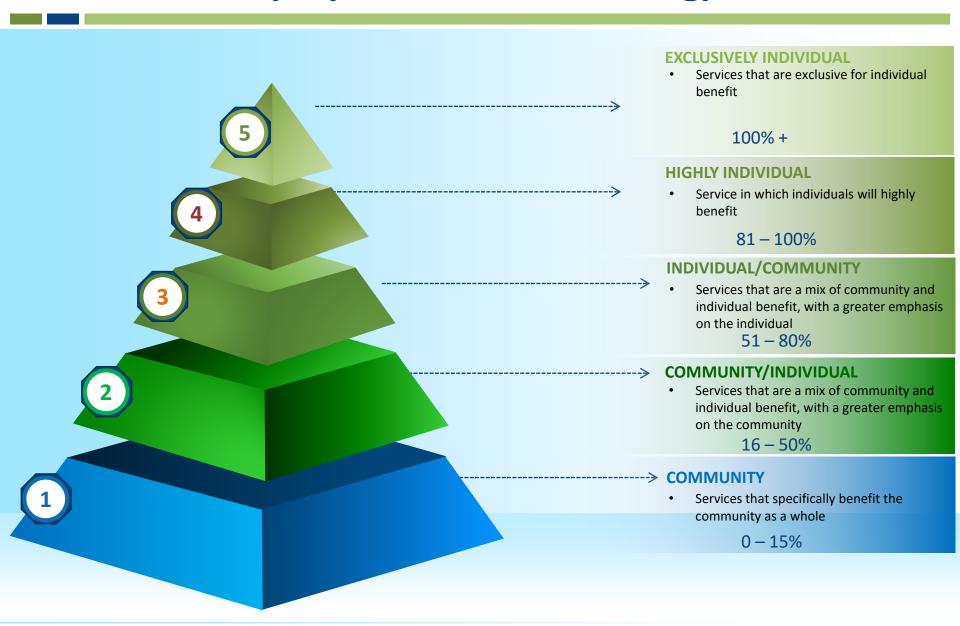
- Parks & Recreation Dept (PARD) operating budget consumes ~ \$5.3M or 6% of the FY20 budget
- PARD Programs generate \$545K in revenue with \$4.8M supported by sales & property tax revenue
- FY21 budget General Fund property tax revenue could potentially face significant constraints due to SB2-property tax cap and pending changes to over 65 property tax

Setting fees based on cost recovery accomplishes the following:

- Diversifies revenue to reduce property tax dependency
- Utilizes tax dollar subsidies on community based programs
- Meets state mandates requiring all user fees be justifiable
- Moves toward self funding programs the community currently enjoys

Cost Recovery Pyramid Methodology SANDIACOS

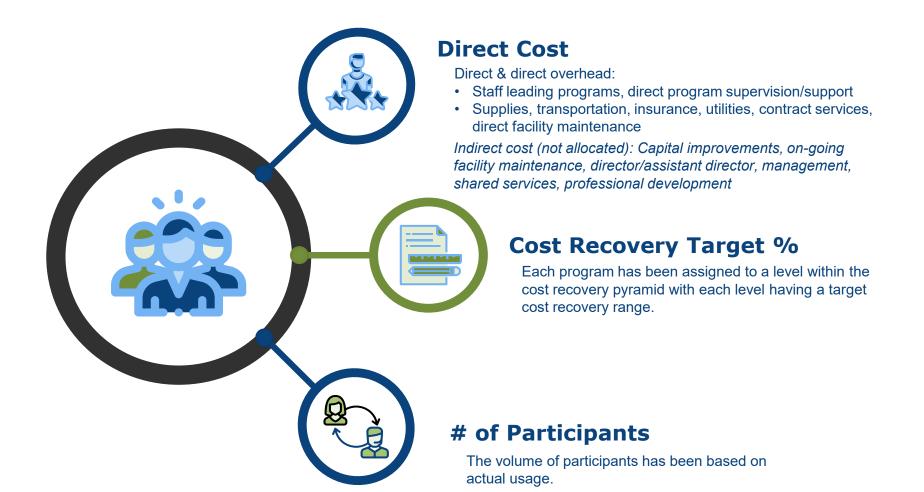




Fee Calculation



(Direct Cost * Cost Recovery target %) / # of participants



Pyramid Ranking Based on Beneficiary samparcos















Parks & Recreation Budget Comparisons Parks & Recreation Budget Comparison Parks & Recreation Parks & Recre

Operating Budgets Compared to other Cities

Recovery

	PARD Operating Cost	PARD Revenue	Recovery %
San Marcos	\$5.3M	\$545K	10.2%
New Braunfels	\$7.8M	\$3.6M	46.3%
Georgetown	\$11.8M	\$2.8M	24.1%
Round Rock	\$12.4M	\$3.5M	28.5%



	Current Fee	Target Cost Recovery Fee	Proposed Fee	Golds Gym	Metroflex	NB Das Rec
Activity Center Adult Annual Membership	\$84	\$220	\$105	\$198	\$299	\$420

PROPOSED FEES IN SUPPORT OF COMMUNITY EVENT SERVICES

Proposed New Fees



New Fees to support Community Events

Description	Fee	Unit of Measure	Cost Basis
Event Setup	\$48	Per hour	Labor
Tent rental (10x20)	\$26	Each	Equipment
Tarp rental	\$60	Each	Equipment
Tent/Tarp Setup	\$36	Per hour	Labor
Temporary Fence Setup	\$36	Per hour	Labor
Sink Station Setup	\$36	Per hour	Labor
Eco-station/contamination	\$39	Per hour	Labor
Pod Storage	\$315	Per month	Pass through cost
Security	\$45	Per hour	Labor
Banner hanging	\$400	Each	Labor & equipment
Barricades at Parking lot Entrance	\$45	Each	Labor & equipment
Fire Department: MERV (medical emergency response vehicle) Command Brush Engine	\$85 120 140 200	Each	Labor & equipment

Timeline & Next Steps



October – November





- 1. City Council approval of assumptions
- 2. Parks Board review of fees and provide recommendations
- 3. Council Worksession follow up
- 4. Parks Board recommendations

- Council agenda with proposed fees
- 6. Proposed effective date



City of San Marcos

630 East Hopkins San Marcos, TX 78666

Legislation Text

File #: ID#19-686, Version: 1	
AGENDA CAPTION:	

Receive a Staff presentation and hold discussion regarding updates on the final two remaining bond projects of the 2017 Bond Election; the relocation of Fire Station #2 and the design and construction of a new Fire Station #6 within the Trace neighborhood, and provide direction to the City Manager.

Meeting date: November 6, 2019

Department: Fire Department

Amount & Source of Funding

Funds Required: N/A Account Number: N/A Funds Available: N/A Account Name: N/A

Fiscal Note:

Prior Council Action: City Council previously authorized an alternate construction delivery method (design/build) for Fire Station #2.

<u>City Council Strategic Initiative</u>: [Please select from the dropdown menu below] City Facilities

Choose an item.

Choose an item.

<u>Comprehensive Plan Element (s)</u>: [Please select the Plan element(s) and Goal # from dropdown menu below]

☐ Economic Development - Choose an item.
☐ Environment & Resource Protection - Choose an item.
☐ Land Use - Choose an item.
□ Neighborhoods & Housing - Choose an item.
oxtimes Parks, Public Spaces & Facilities - Funding and staffing to ensure quality public safety and community
services
☐ Transportation - Choose an item.

File #: ID#19-686, Version: 1	
□ Not Applicable	

<u>Master Plan</u>: [Please select the corresponding Master Plan from the dropdown menu below (if applicable)] Choose an item.

Background Information:

In May of 2017, San Marcos voters approved multiple bond projects including several public safety projects including the relocation of the existing Fire Station #2 to another more suitable site within the city and the design and construction of a new Fire Station #6 to be located on a parcel of donated land within the Trace subdivision on the South end of the city. A station location study conducted in 2014 by Mike Pietsch Consultants determined the ideal location for a new Station 2 to be at the intersection of WonderWorld Dr and Old Ranch Rd 12. A site was identified within the La Cima neighborhood that meets the criteria set forth in this study and eliminates the extreme coverage overlap that exists currently between the existing Station 2 and Station 1. This site was donated to the City as part of the development agreement with the LaCima developers and the City. Subsequent to Council approval, The City entered into a design/build agreement with Flintco Construction to design and build the new Station 2 at this site, and the purpose of this work session in part is to update the Council on the status of that project in preparation for an action item on this same Council agenda that will request approval for an amendment to the design agreement. The secondary purpose of this work session is to provide Council with an update on the Station 6 project and ask for approval to begin the design and construction processes for this station. A much more comprehensive memo and additional background exhibits are attached to this item.

Council Committee, Board/Commission Action:

The 2017 bond committee recommended that these items be considered for approval by the voters. That bond election was successful with an approval rating of approximately 78%.

Alternatives:

Placing either of these projects at alternate sites would cost the city in excess of \$1 million per site due to the fact that land for both sites was donated by developers, and also because site design work would have to be replicated at any new sites.

Recommendation:

The staff recommendation is to move forward with the approval of the amendment to the design/build agreement with Flintco Construction for the Gross Maximum Price of the construction for Station 2. Staff also

File #: ID#19-686, Version: 1

recommends that Council consider allowing Jacobs Project Management to begin negotiations with West/East Architects to start the design process for Station 6 after formal consideration during the November 19, 2019 regular Council meeting.



CITY COUNCIL Work Session

Wednesday, November 6, 2019



Work Session

Receive a work session update on the final two remaining bond projects from the FY17 bond election: Fire Station #2 relocation and Fire Station #6 design.

2



Background

Fire Station #2

- Relocation to another more suitable site within the City.
- Identified a cite within the La Cima neighborhood.
 - This site was donated to the City as part of the development agreement, which Council approved.
- The City entered into a design/build agreement.
- Funding of Budget amendment

Fire Station #6

- To be located on a parcel of donated land within the Trace subdivision on the South end of the City
- Requesting approval to move forward
- Funding of budget increases



New Fire Station Elevation



4 sanmarcostx.gov



Fire Station #2 Relocation Bond Language

Shall the City Council of the City of San Marcos, Texas be authorized to issue the bonds of the City, in one or more series, in the aggregate principal amount of \$17,450,000, with the bonds of each such series, respectively, to mature serially within not to exceed thirty years from their date, and to be sold at such prices and bear interest at such rates, as shall be determined within the discretion of the City Council, in accordance with law at the time of issuance, for the purpose of constructing, improving, renovating and equipping Public Safety Facilities to include the police and fire departments and related emergency and training facilities, including improvements to the police station, construction of a new Fire Station No. 8 and replacing existing Fire Station No. 2 and the acquisition of any necessary sites and related water, wastewater, drainage, streets, sidewalks, parking, infrastructure and other related costs; and shall said City Council be authorized to levy and cause to be assessed and collected annual ad valorem taxes on all taxable property in the City in an amount sufficient to pay the annual interest on said bonds and provide a sinking fund to pay the bonds at maturity.



Fire Station #2 Relocation

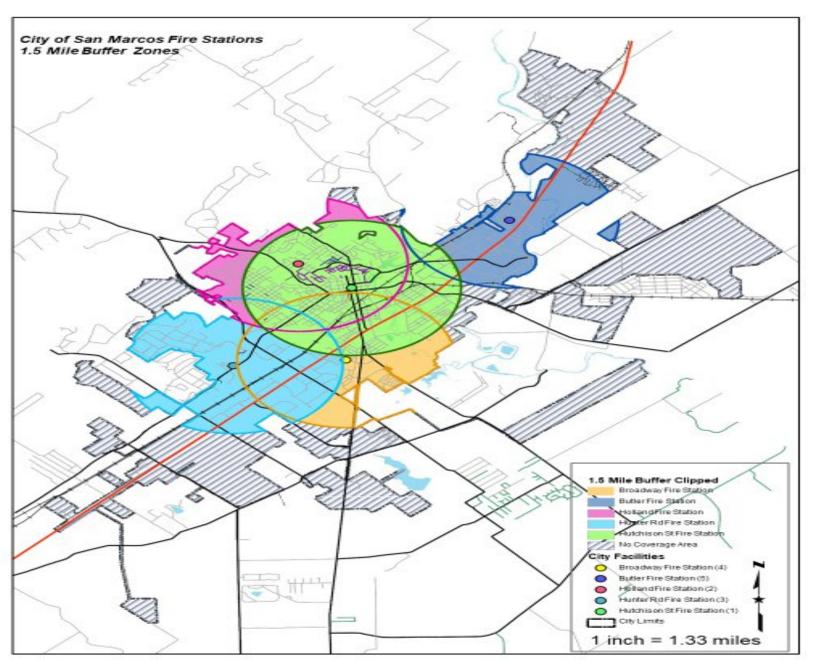
Voter Education Language:

Holland Fire Station # 2 relocation (Capital costs \$5.2 million): This project will relocate Fire Station #2 to a new site approved by the Task Force. The new facility will replace the 63 year old structure that the department has occupied since 1954. Over 76% of the existing Station's coverage area is overlapped by other stations which has resulted in a very low call volume. The station's new location was recommended by a fire consultant who specializes in Insurance Services Office ratings, which is one of the primary ways insurance companies develop fire insurance rates for residential and commercial customers. Constructing the new station at a location near Wonder World Drive and Old Ranch Road 12 improves the distribution of fire department facilities which will result in shorter response times for a larger portion of the overall community.



SANMARCOS Station Coverage Overlap

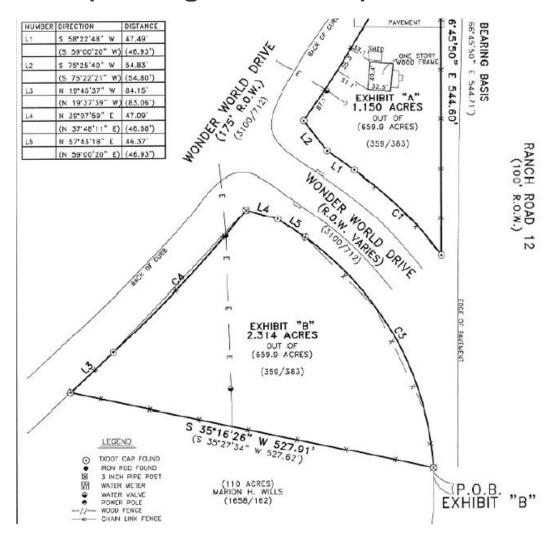
Current Station 2 and Station 1





Initial Location Considered - Station 2

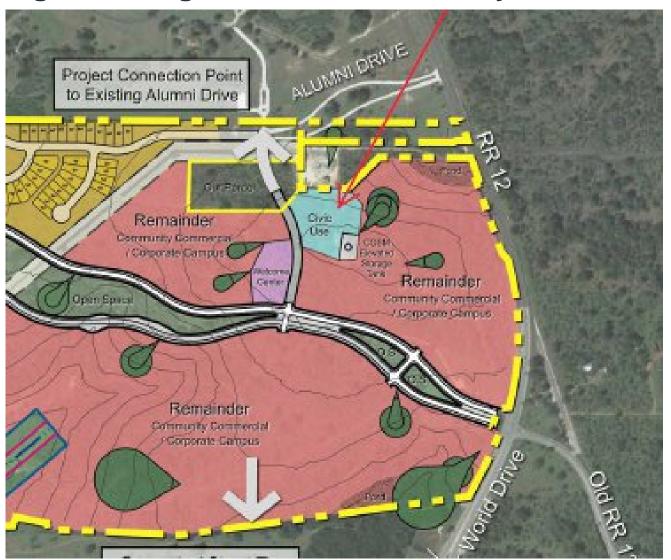
2.3 acres at Wonderworld and Old RR12 (no longer available)





New Location - Station 2

3.5 acres inside La Cima (donated by developer)
Design Build Agreement Authorized by Council in 2019.





Station 2 Budget Considerations

Original budget estimates

 Based on the pre-construction cost estimates for the new Station 4 on East Wonder World Drive

Site concerns

 The La Cima site is over the Edward Aquifer recharge zone and will require more extensive site prep.

Construction costs

- Cost estimates since Station 4 have escalated by 17.4%
- Cost reduction efforts by Jacobs and City staff identified \$250,750 in savings through design.

Comparable projects cost data

Indicates we are in line with the market (\$428 - \$438 per sq ft)

Funding overage

 Will be covered by interest earnings on bonds that were sold sanmarcostx.gov early – about \$1 million in capacity.



Station 6 Estimates and Design

- Original budget cost estimate
 - \$4.5 million plus \$2 million to be contributed by the developer to be put toward the cost of the Fire Station and equipment.
- Developer must achieve milestones, per the funding agreement, before payments are triggered.
 - 1st payment \$500,000 received in 2019
 - 2nd payment \$750,000 due in 2020
 - Final payment \$750,000 due in 2022
- Staff is concerned about cost increases while waiting for 2nd payment. Again, interest earnings could offset if bonds are sold early.
 - Apparatus cost is \$785,000 if ordered before 12/31/19. 5% increase effective January 2020
 - Construction cost escalation similar to that seen on Station 2
 - Funding overview same methodology used with Station 2



Staff Recommendations

- Approve Guaranteed Maximum Price amendment to the design/build agreement for Station 2 (La Cima)
- Approve moving forward with design and construction of Station 6

12



Questions and Discussion



MEMO

To: Mayor and Council

FROM: Bert Lumbreras, City Manager

DATE: October 24, 2019

RE: Fire Station #2 (LaCima) and Fire Station #6 (Trace)

The purpose of this memo is to provide background material for your consideration in preparation for an upcoming work session presentation followed by a related action item on November 6, 2019 related to the design and construction of the relocated La Cima Fire Station #2. It will also provide updated information on the status of the Trace Fire Station #6 project, the last remaining bond project related to the 2017 bond election. The work session presentation and this memo are intended to share information related to the following areas of interest: The location of Fire Stations #2 and #6, the projected cost of the stations, and the background of the anticipated budget increases over the initial projected budget.

Fire Station #2 location:

The location for the planned La Cima Fire Station #2 relocation was presented to the voters in 2017 during a series of informational meetings conducted all across the city. The language copied below was used in the informational sessions with regard to the location of this station:

Holland Fire Station #2 relocation (Capital costs \$5.2 million): This project will relocate Fire Station #2 to a new site approved by the Task Force. The new facility will replace the 63 year old structure that the department has occupied since 1954. Over 76% of the existing Station's coverage area is overlapped by other stations which has resulted in a very low call volume. The station's new location was recommended by a fire consultant who specializes in Insurance Services Office ratings, which is one of the primary ways insurance companies develop fire insurance rates for residential and commercial customers. Constructing the new station at a location near Wonder World Drive and Old Ranch Road 12 improves the distribution of fire department facilities which will result in shorter response times for a larger portion of the overall community.

The language copied below is the actual bond language presented to the voters:

Shall the City Council of the City of San Marcos, Texas, be authorized to issue the bonds of the City, in one or more series, in the aggregate principal amount of \$17,450,000, with the bonds of each such series, respectively, to mature

serially within not to exceed thirty years from their date, and to be sold at such prices and bear interest at such rates, as shall be determined within the discretion of the City Council, in accordance with law at the time of issuance, for the purpose of constructing, improving, renovating and equipping Public Safety Facilities to include the police and fire departments and related emergency and training facilities, including improvements to the police station, construction of a new Fire Station No. 8 and replacing existing Fire Station No. 2 and the acquisition of any necessary sites and related water, wastewater, drainage, streets, sidewalks, parking, infrastructure and other related costs; and shall said City Council be authorized to levy and cause to be assessed and collected annual ad valorem taxes on all taxable property in the City in an amount sufficient to pay the annual interest on said bonds and provide a sinking fund to pay the bonds at maturity.

Please note that the number of the second fire station referenced in the bond language has been changed from 8 to 6 in order to remain consistent with our current station numbering.

The SMFD Station Location Plan was updated in 2014 as part of a contract with Mike Pietsch, P.E. Consulting. The report written by Mr. Pietsch was solicited by the city as part of the periodic Insurance Service Office (ISO) rating process for the city. Mr. Pietsch is one of the foremost experts in the country as it relates to the ISO rating process. In his report, Mr. Pietsch determined that the existing Holland St. Fire Station #2 needed to be relocated, and that the ideal location for the new Station #2 would be a location near the intersection of Wonder World Dr. and Old RR12. After the report was accepted by the city, a 2.3 acre corner location was considered that was exactly at the intersection of Wonder World Dr. and Old RR12. Before the city could purchase that parcel of land, it was sold to another buyer. An image of this site is attached to this document and labeled as Exhibit A. Not long thereafter, the site within the LaCima subdivision was identified and was strongly considered due to the fact that the developer was willing to donate the land to the city as part of the development agreement. Before this location was finalized, Chief Stephens consulted with Mr. Pietsch to ensure that the location was close enough to his originally recommended site to still meet his recommendation. Mr. Pietsch gave direction that the site was well within the area of acceptability. A visual map of this location is attached as Exhibit B. The report completed by Mr. Pietsch is attached to this memo as Exhibit C.

Additionally, Chief Stephens has worked with one of our COSM GIS Analysts to confirm the recommendations provided by Mr. Pietsch. She has studied multiple scenarios using GIS data and technology and confirms that this site meets the Fire Department's response time goals much better than the existing location of Holland St. Station #2. Attached are visual depictions created by the analyst that show heat maps of response times to various areas within the city from Station 1 (downtown), the current Holland St. Station 2 location, and the proposed new location for Station 2 just inside La Cima. A side-by-side comparison of these images shows that the new La Cima Station 2 location will provide a more broad distribution of the green and yellow areas, depicting a better distribution of lower response times. These documents are attached and labeled as *Exhibits D1-D3*.

One question that has been discussed in the past surrounds a parcel of property owned by the city in the 500 block of Craddock Ave. This site is not within an acceptable distance to the ideal site recommended by Mr. Pietsch because it is not far enough away from the existing Holland St. Station 2 to improve overall response times for the community. It is also too close to the Downtown Fire Station #1 to provide much relief from the current overlap in the response zones of stations 1 and 2. Finally, the size of this parcel is approximately 1.8 acres, a little more than 1 full acre less than the ideal size of a fire station site. A visual map of this location is included as *Exhibit E* to this memo

Fire Station #2 and Fire Station #6 budget information:

In May 2017, voters approved the construction of Fire Stations #2 and #6. Station 6 is a new station that will be located in the Trace subdivision on the South end of the City. The Station 2 location plan within La Cima was discussed in the previous section of this memo.

The City constructed Fire Station #4 (East Wonder World Dr) in 2016-2018 at a hard construction cost of \$4,498,167.32 and total project cost around \$5.2 Million. The plans from this station were to be used as a prototype for future stations including both Stations 2 and 6.

The total project budget presented to voters in 2017 for Station 2 was \$5,200,000 and \$4,500,000 for Station 6. The proposed plan for Station 6 included an additional \$2,000,000 from the developer to purchase the required fire apparatus and assist with construction of the station. The total project budget allocated for the Station is \$5,500,000, not including the new fire apparatus. These project budgets were based on the estimate to build Station 4 in 2016 prior to beginning construction.

The design-builder's Guaranteed Maximum Price (GMP) proposal for construction of Station 2 is \$5,369,405 which brings the total project cost estimate to \$6,240,000. This is \$940,000 over the original project budget. There are several factors that have contributed to this cost escalation.

- The Station 2 site is over the Edwards Aquifer Recharge Zone, which required a more extensive stormwater quality design and additional sitework adding about \$250,000 to the cost of work.
- 2. The original project budget was based on 2016 estimates. The construction industry in Texas has experienced an annual increase in cost of work between 4% 5% over the past few years. Paul Acevedo with Jacobs Project Management estimated the total cumulative cost escalation between 2016 and 2020 at 17.38%. Using the final construction price for the new Fire Station #4, inflation in the construction market would account for \$560,000 \$700,000 of the increased cost.

With the input of the Fire Chief Les Stephens, a list of non-program related scope items and design features were pulled from the project to reduce the Guaranteed Maximum Price (GMP) and help mitigate the cost overrun. The design team reduced the 2nd floor space by about 2,000 square ft, adjusted the preferred building footprint, and reduced the driveway footprint to save on earthwork and concrete costs. The design team also identified building finishes that were overdesigned on the prototype station such as door hardware and storefront framing and

replaced those finishes with other options that maintained durability and functionality at a reduced price. In total, the savings identified amounted to just over \$250,000. In addition to the cost savings design changes, the design builder presented a final GMP proposal with zero design-build contingency and reduced their prior approved general conditions fee by \$107,814.

We also have evaluated and recommended features that will extend the life of the facility and that will minimize maintenance cost in the future. For example, stucco instead of brick could be used for this facility resulting in a little over \$100,000 in savings, but the maintenance and upkeep of brick are substantially less over the life of the facility.

Based on the final GMP proposal, the construction cost for Station 2 is estimated to be \$431/sqft. The final price per square ft is consistent with the costs other jurisdictions are experiencing on similar new fire station projects. Below is list of current fire station projects across the State and their respective construction cost per square foot totals. This information was provided by Mr. Tommy Abercrombie, our consultant working on the design of the Fire Department training facility. Mr. Abercrombie did not provide backup material but rather provided these construction cost estimates after speaking with the contractors working on the projects.

- Burleson Fire Station #2- \$430/sq ft
- Fort Worth Fire Station #45 \$438/sq ft
- Frisco Fire Station #9 \$428/sq ft
- Schertz Fire Station \$481/sq ft

Additionally, we requested and received similar information from JE Dunn Construction. The data provided was related to three recent fire station projects they have completed. The average construction cost per square foot for those projects was \$461.23. The document provided by JE Dunn is attached for reference and is labeled *Exhibit G*. After review of the design build team's GMP proposal against the updated design and current market conditions, the City staff recommends approval of the GMP amendment to move the project forward into the construction phase. To cover the budget increase, the City will use interest earned on the investment of funds to make up this shortfall. City funds are invested in secure investments until the funds are needed. Due to rising interest rates over the past several years, the investments have produced a higher rate of return than in the past 8 years. As a result, the City has accumulated close to \$1.0M in interest earnings on the invested proceeds from bond sales that can be used to fund projects. We will use this to cover the \$900K shortfall for Station 2. We will continue to earn interest on these investments and will use the amounts earned over the next 12-18 months prior to construction to fund the shortfall for Station 6.

In terms of the Trace Station #6, per the City's development agreement with Trace, Trace is not obligated to supply the additional project funds to the City related to Station 6 until certain milestones are met. Trace was required to send \$500,000 in Public Improvement District Bond proceeds to the City. This occurred in 2019. Trace is scheduled to make two remaining equal payments to the City as follows:

- \$750,000 within two years of the first certificate of occupancy
- \$750,000 within four years of the first certificate of occupancy

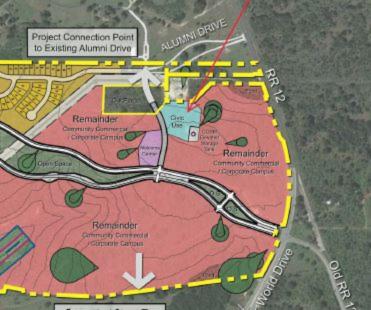
This last payment is not expected until 2022 so the City was originally planning on deferring the construction until a time closer to when we would receive the money. The first Certificate of Occupancy was at the end of 2018. However, due to the 4% to 5% annual escalation in construction prices, Jacobs and city staff recommend beginning the project as soon as possible. The City has the capacity to loan itself the funds and reimburse itself when the Trace funding is due.

Currently the estimated total project cost for the Trace Station 6 is \$7,285,000, which is \$785,000 over the original project budget. City staff recommends authorizing the design and construction of Station 6 beginning with contracting with the design team to design the Trace Fire Station. Once that is complete, the City recommends a Competitive Sealed Proposal (CSP) construction delivery method. The CSP contractor solicitation process ensures the City has the opportunity to select the most competitive pricing on the open market. A visual depiction of the Station 6 proposed location within the Trace subdivision is attached to this memo and is titled *Exhibit F*.

Reflecting on the lessons we have learned as we've worked through these bond projects, I've made two recommendations to staff that I would like to share in closing this memo. The first is that we will not make specific references to building numbers or names in future bond language. This will help to avoid confusion that happens when these factors inevitably change over time. The second is that we will make every attempt to have all projects as close as possible to shovel ready before seeking voter approval for bond funding. We hope this practice will minimize time delays and the associated budget overruns seen as a result of escalating costs over time.

In summary, both Jacobs and staff recommend moving forward on both the La Cima Station 2 and Trace Station 6 projects in the presently recommended locations as identified in this memo. Doing so holds true to the information we presented to the voters in 2017 and helps to avoid additional costs to the city in the form of land acquisition and land design costs by keeping these stations on land already owned by the city. Moving forward with the Trace Station #6 now also helps to minimize construction escalation costs that seem to be certain in the industry.





Mike Pietsch, P.E. Consulting Services, Inc.

3101 S. Country Club Rd. Garland, TX 75043-1311 972.271.3292 Phone 214.728.6507 Cell 972.840.6665 Fax michaelpietsch@tx.rr.com

A Report From

MIKE PIETSCH, P.E. CONSULTING SERVICES, INC.

To

THE CITY OF SAN MARCOS

Demonstrating a Master Fire Station Location Plan

February 24, 2014

Submitted by:

W. Michael Pietsch, P.E. Civil Engineer

A Report From

MIKE PIETSCH, P.E. CONSULTING SERVICES, INC.

To

THE CITY OF SAN MARCOS

Demonstrating a Master Fire Station Location Plan

Explanation of This Report

This report will develop an accurate fire station location plan for the City of San Marcos. This study utilizes 1.5-mile response boundaries (approximates 3 to 4-minute response times) for engine companies. This is the most accurate method of locating fire stations that exists today. These 1.5-mile engine company response boundaries are the exact methodology utilized by Insurance Services Office (ISO) when a community is rated.

The strategic placement of existing and proposed fire stations is critical to the emergency response and ISO rating for the City of San Marcos. This report will address the immediate needs of the City of San Marcos along with future needs based on the maps provided by Chief Stephens on February 20, 2014.

An additional fire station may be required when the built-upon road base (or fire hydrant count) outside 1.50-miles of an existing fire station is 50% of that within a 1.50-mile polygon of an average existing fire station. If a suitable location can be found that brings 50% or more of the built-upon road base (or fire hydrant count) within 1.50-miles of the location then an additional fire station housing an engine company is required.

The parameters placed on this report due to political and/or operational considerations are as follows: Fire Stations #1, #3, and #5 must remain at their current location and for the immediate future engine/ladder ("Quint") truck companies must be utilized in lieu of 2 company houses (fire stations) deploying an engine company and a dedicated ladder truck company.

A dedicated ladder truck company or the ladder truck credit associated with an engine/ladder ("Quint") truck company is not used to determine additional fire

stations. However, once the fire stations (existing and proposed) are determined based on the methodology utilizing the 1.5-road mile polygon then the ladder truck or the ladder truck credit associated with an engine/ladder ("Quint") truck are placed (where needed) based on a 2.5-road mile coverage. The process of requiring an additional dedicated ladder truck company or the ladder truck credit associated with an additional engine/ladder ("Quint") truck company is exactly the same as that for additional engine companies above; except a 2.50-road mile polygon is used.

This report will demonstrate the required apparatus and staffing based on both the engine/ladder ("Quint") truck company concept and the dedicated ladder truck company (2 company houses) concept at the fire stations which require elevated stream capability.

Throughout this report the word "company" implies both the apparatus and it's required staffing.

The suggestions developed from this report relate only to a fire station location study for the City of San Marcos. They are not for property loss prevention or life safety purposes and no life safety or property loss prevention suggestions are made.

Executive Summary

The single most critical item when addressing newly developed areas or areas to be developed in the future is to ensure all built-upon areas are within 5-road miles of a fire station housing an engine company and a 1000-foot hose lay distance of a creditable fire hydrant. Developed areas outside a 5-road mile polygon of a fire station housing an engine company are assigned an ISO PPC 10 (no recognized fire protection) regardless of the water supply infrastructure. Currently several insurance companies are refusing to write or renew properties in class 10 areas. The property owners that do receive insurance coverage pay the maximum rate.

Developed areas within a 5-road mile polygon of a fire station housing an engine company but outside a 1000-foot hose lay distance of a creditable fire hydrant receive an ISO PPC of 9 or 8b (next to maximum allowed rate).

The proposed fire station location plan within this report satisfies the class 10 issue. Until such time as the City of San Marcos erects the fire stations suggested within this report automatic aid agreements should be signed with neighboring communities in order that newly developed areas meet the 5-road mile criteria.

This report will demonstrate that, based on the criteria within the ISO rating document, there exists an immediate need to relocate 2 fire stations. The erection of 4 additional fire stations should be considered based on proposed future development; but these 4 additional fire stations are not required at this time. The suggested locations for the 2 fire stations which should be relocated and the 4 proposed additional fire stations are within the body of this report. The apparatus and staffing requirements for the existing (and proposed relocated) fire stations will also be discussed in detail. The future fire stations should all deploy at least an engine company; however, the requirement for additional ladder truck or engine/ladder ("Quint") truck companies are based on future development and cannot be accurately determined until the area is developed.

Please note that the City of San Marcos would most likely sustain the city's ISO rating of 2 by relocating Fire Stations #2 and #4 and providing a third engine/ladder ("Quint") truck company at Fire Station #1. However, Fire Station #1 is too small to house modern fire apparatus. Until Fire Station #1 can be renovated to the extent modern fire apparatus can by deployed from this fire station the third engine/ladder ("Quint) truck company should be deployed from relocated Fire Station #2 or relocated Fire Station #4. Please note that Fire Stations #1, #3, and #5 are perfectly located to house the required engine/ladder ("Quint") truck companies or future dedicated ladder truck companies.

The City of San Marcos is reaching a level of population and developed area where dedicated ladder truck companies may be a much better fit than utilizing engine/ladder ("Quint") truck companies to provide elevated stream capability.

The City of San Marcos presently has the ISO equivalent of 5 engine companies and 0.74 of a ladder truck company available to respond to all first alarm structure fires deployed from 5 fire stations. The reason the ladder truck credit is so diminished is due to the ISO requirements within their document titled the "Total Quint Concept"; which is named incorrectly. The "Total Quint Concept" will be discussed in great detail in the paragraphs which follow. This discussion should allow the City of San Marcos to make an informed future decision on which direction, dedicated ladder truck companies or engine/ladder ("Quint") truck companies, better protects the lives and property of the citizens the San Marcos Fire Department serves.

The City of San Marcos will receive a large point reduction based on the ISO rating document due to an extremely technical aspect of the grading schedule titled the "Total Quint Concept". This concept (which is misnamed) requires that at least 50% (not 100%) of the existing fire stations deploy a stand alone engine/ladder ("Quint") truck company; which on the surface sounds very simple. This would require the City of San Marcos to strategically deploy 3 engine/ladder ("Quint) truck companies from the 3 existing and 2 relocated fire stations.

The technical issues arise when a community does not meet the "Total Quint Concept". Obviously the San Marcos Fire Department does not presently meet the "Total Quint Concept" since it operates 2 engine/ladder ("Quint") truck companies deployed from 2 of the 5 existing fire stations. It is due to the "Total Quint Concept" that this report will suggest an additional engine/ladder ("Quint) truck company or dedicated ladder truck companies to solve the significant deficiency based on the ladder truck requirements within the ISO rating document.

If the City of San Marcos elects to utilize the "Total Quint Concept" Fire Stations #1, #3, and #5 should house engine/ladder ("Quint) truck companies to sustain the ISO rating of 2. Due to the fact that Fire Station #1 is not suited to house modern fire apparatus the additional third engine/ladder ("Quint") truck company should be deployed from relocated Fire Station #2 or #4. If the City of San Marcos decides to utilize dedicated ladder truck companies Fire stations #1 or #3 and #5 should be dual company houses deploying an engine company and a dedicated ladder truck company to sustain an ISO PPC 2.

The City of San Marcos should not attempt an ISO re-survey until the engine/ladder ("Quint") versus dedicated ladder truck company issue is solved and Fire Stations #2 and # 4 are relocated.

Irrespective of which method the City of San Marcos chooses to provide elevated stream capability 7 existing companies (the ISO equivalent of 5 engine companies and 2 ladder truck companies needed to sustain the class 2) will require 42 firefighters on-duty 24/7 for full staffing credit with 28 firefighters on-duty 24/7 to achieve the goal of "4 around staffing". The ISO rating of 2 can be most likely be sustained with a level of "3 around staffing" which requires 21 firefighters on-duty 24/7. The staffing requirements are on-duty 24/7 as a minimum; not just assigned

Regardless of what you may here anywhere else (especially from the manufactures of fire apparatus) an engine/ladder ("Quint") truck company requires 9 firefighters on-duty 24/7 for full credit if the community meets the "Total Quint Concept" and 12 firefighters on-duty 24/7 assuming the requirements of the "Total Quint Concept" are not met. Staffing level requirements within the ISO rating document are not reduced utilizing the "Total Quint Concept" versus 2 company houses deploying and engine company and a dedicated ladder truck company as many believe or try to lead you to believe.

Analysis of the Data

To aid in developing a master plan for the City of San Marcos, based on present development, 2 fire stations should be re-located and 1 fire station should be renovated to the extent it can house modern fire apparatus. When future developed occurs to the extent that additional fire stations are required 4 fire stations should be erected. The fire station locations listed below are presented in their order of priority with the appropriate apparatus and staffing deployment.

The following re-locations are offered for your consideration:

- 1. Relocate existing Fire Station #2 to Old Ranch Road #12 and Wonder World Rd. housing an engine company.
- 2. Relocate existing Fire Station #4 to Wonder World Rd. and State Highway 123 housing an engine company.

Based on possible future development 4 additional fire stations may be required as these areas develop to the extent additional fire stations are required. Please note that the exact positioning of thoroughfares and street extensions will greatly affect the location of these 4 additional fire stations. Whether an engine company and a dedicated ladder truck company, or an engine/ladder ("Quint") truck company is required cannot be determined until the development occurs.

The following future fire station locations are offered for your consideration and listed in their order of priority:

- 1. Erect future Fire Station #6 in the vicinity of Hopkins Rd. and State Highway 21.
- 2. Erect future Fire Station #7 in the vicinity of one-half way between Old Bastrop Rd. and Interstate Highway 35 on Centerpoint Rd.
- 3. Erect future Fire Station #8 in the vicinity of the Airport on State Highway 21.
- 4. Erect future Fire Station #9 in the vicinity of 3.25-miles south of the suggested location of relocated Fire Station #4.

Please note the priority order of any additional fire stations should be based on what provides the best level of fire department response to emergency calls for service; not what improves an insurance rating. In a perfect world the 4 additional locations demonstrated above will correlate with any fire department response districts deemed deficient by Chief Stephens and his staff. Hopefully the locations will be the similar; only the priority will differ. If the priorities indeed

do differ I would certainly utilize the priority order as determined by Fire Chief Les Stephens and his staff.

The following deployment of apparatus and staffing is suggested to sustain an ISO PPC 2 if Fire Stations #2 and #4 are relocated with the elevated stream capability provided via the "Total Quint Concept".

- 1. Central Fire Station (#1): Engine/ladder ("Quint") truck company with 6 firefighters. The apparatus at Fire Station #2 could be switched with the apparatus at this fire station until such time as Fire Station #1 can be renovated in order to house modern fire apparatus.
- 2. Fire Station #2: Engine company with 3 firefighters.
- 3. Fire Station #3: Engine/ladder ("Quint") truck company with 5 firefighters.
- 4. Fire Station #4: Engine company with 3 firefighters.
- 5. Fire Station #5: Engine/ladder ("Quint") truck company with 4 firefighters.

The following deployment of apparatus and staffing is suggested to sustain an ISO PPC 2 if existing Fire Stations #2 and #4 are re-located with the elevated stream capability provided via dedicated ladder trucks.

- 1. Central Fire Station (#1): Engine company with 3 firefighters.
- 2. Fire Station #2: Engine company with 3 firefighters.
- 3. Fire Station #3: Engine company and a dedicated ladder truck company with 6 firefighters.
- 4. Fire Station #4: Engine company with 3 firefighters.
- 5. Fire Station #5: Engine company and dedicated ladder truck company with 6 firefighters.

Affect on the ISO Rating for the City of the City of San Marcos

At present the City of San Marcos enjoys an ISO rating of 2. The class 2 rating for the City of San Marcos is based on the fire defense infrastructure (Structural Conditions, Fire Service Communications, Fire Department, Fire Marshal, Building Official, and Water Suppliers). It is beyond the scope of the proposal for this report to analyze the ISO rating. This takes a complete grading of all factors that comprise an ISO rating as discussed in the second sentence of this paragraph. The proposal for this report only addresses a fire station master plan demonstrating the proper location of present and future stations to sustain the ISO rating of 2 along with the required apparatus and staffing at the required existing and relocated fire stations.

With the re-location of Fire Stations #2 and #4 parlayed with providing the San Marcos Fire Department with a third engine/ladder ("Quint") truck company the coveted ISO 2 rating should be sustainable. Please remember the City of San Marcos graded 80.00 during the last ISO survey; which is right on the number (80.00 to 89.99 establishes an ISO rating of 2).

If the mission of the City of San Marcos is to achieve an ISO rating of 1; which is an extremely valuable economic development tool, the following fire defense infrastructure would most likely be required. What follows is only an educated guess based on my 40-years as an ISO Field Representative, ISO Technical Reviewer, and Consultant for the reasons discussed in the first paragraph of this section. In addition to relocating Fire Stations #2 and #4 and providing a third engine/ladder ("Quint") truck company the level of staffing within the San Marcos Fire Department would have to be dramatically improved. The present level of 18 firefighters on-duty as an average grades in the Class 7 percentile based on the requirements of the ISO rating document; whereas the City of San Marcos as a whole grades in the Class 2 percentile. There are far more important reasons than an insurance classification to provide this increase in the level of fire department staffing. However the increase in staffing will be the key to achieving the coveted ISO rating of 1.

The ISO rating document will actually require that 8 companies be staffed to meet all the requirements of the ISO rating document (perfect). In the Executive Summary section of this report I discussed a staffing level for 7 companies to sustain the ISO rating of 2; however to attain the coveted ISO PPC 1 this section of the report will discuss staffing 8 companies. A "rule of thumb" is: 4 around staffing is required for communities that wish to attain an ISO rating of 1; with 3 around staffing required for an ISO rating of 2. To be precise will take developing an ISO grading point total to 2 decimal places; which is beyond the scope of the proposal for this study. A study of this type was performed by me in 2005 for the City of San Marcos.

4 around staffing for 8 companies is 32 firefighters on-duty 24/7. This can be onduty firefighters assigned to firefighting apparatus, EMS units, or squad type units. My "educated guess" is: A number very near 32 firefighters on-duty at all times (not assigned staffing; but on-duty after vacation, sick leave, personal days etc.) will be required to achieve an ISO rating of 1.

If the City of San Marcos improved the ISO rating of 2 to a 1 the commercial property owners within 5 road-miles of a fire station and 1000 feet of a fire hydrant would save a possible **2 per cent** (effect of lowering the PPC from a 2 to a 1) and the residential property owners within 5 road-miles of a fire station and 1000 feet of a fire hydrant would save a possible **1 per cent** (effect of lowering the PPC from a 2 to a 1).

Even though a Class 1 does not receive an appreciable reduction in insurance premiums over an ISO PPC of 2 it has been shown to be an extremely valuable economic development tool.

Many City Managers over the years have voiced to me the importance of an ISO rating of 1 as an economic development tool. The retired City Manager of Plano, Texas told me several years ago that the ISO rating was the third question normally asked by CEOs and CFOs from major companies (especially those outside of Texas). By the way the first question was tax abatements with the second being quality of life. Many times the ISO rating is used by major companies as a measure of the "quality of life" in a community. Even though ISO disclaimers using their rating document in this manner; if a community expends the resources necessary to achieve an ISO rating of 1 on their Fire Department, Water System, Fire Service Communications, Office of the Fire Marshal, and Building Department most likely they are doing the same with law enforcement, streets, parks, etc.

This has been proven over my 11-years as a consultant and most recently has been verified by the fact that during the last 2 calendar years I have been engaged to assist with sustaining the ISO rating of 1 for Frisco, Plano, El Paso, and Stafford. In addition I have attained an ISO rating of 1 for the cities of Richardson, The Woodlands, The Villages, Midland, Webster, McKinney, and Southlake. Each of these communities have spent millions to tens of millions of dollars to improve the fire defense infrastructure of their community with the ISO rating second only in importance to protecting lives and property.

Lastly, please note that I would not feel comfortable submitting a grading point total less than 93.00 to New Jersey (ISO's Home Office) if the mission of the City of San Marcos is to achieve an ISO Public Protection Classification of 1. I edited these ratings for over 11 years as an ISO Technical Reviewer. It has been my experience that any grading point total that develops an ISO PPC must move well into the new class in order to guarantee that the rating remains in that class

to guarantee an ISO PPC 1 resulted from a future survey.			

Conclusion

As budget constraints allow relocate the 2 fire stations as suggested within this report and provide a third engine/ladder ("Quint) truck company deployed from Fire Station #1 (when it is renovated to the extent it can house modern fire apparatus). This should reasonably insure an ISO rating of 2 is sustained and will provide better fire department response distances for the City of San Marcos.

Make the decision of: "Total Quint Concept" versus "Dedicated Ladder Trucks" as the City of San Marcos continues to develop and prosper.

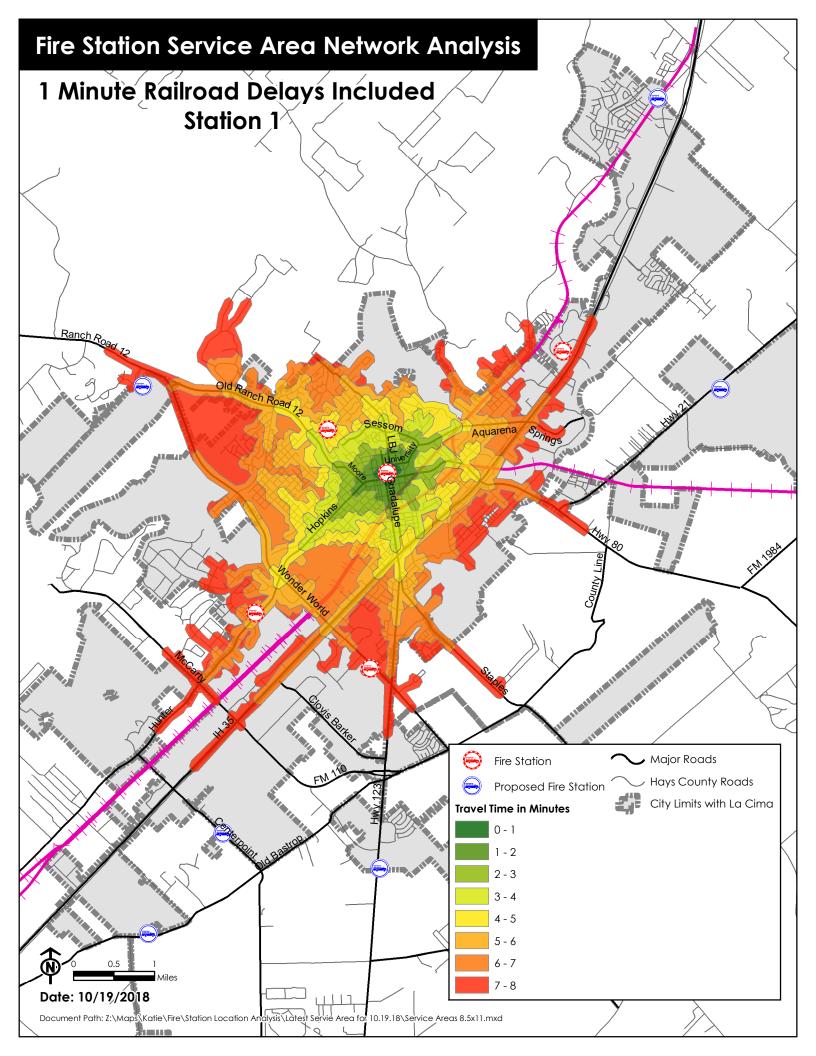
Sufficiently increase staffing levels for the Fire Department serving the City of San Marcos if attaining an ISO rating of 1 is deemed a significant economic development tool.

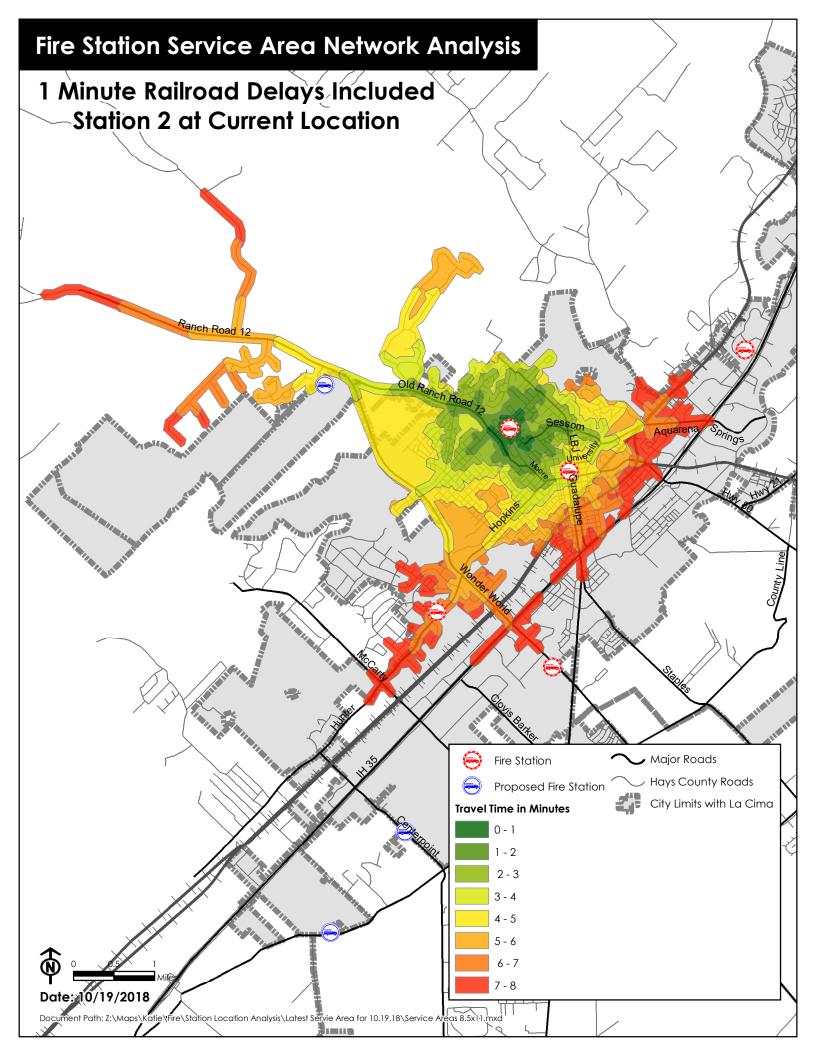
I would very much like to thank Fire Chief Les Stephens and his Staff for the excellent cooperation afforded me during my recent survey. Without their support and continued cooperation after my field evaluation was complete the accuracy and timeliness of this report would be seriously compromised.

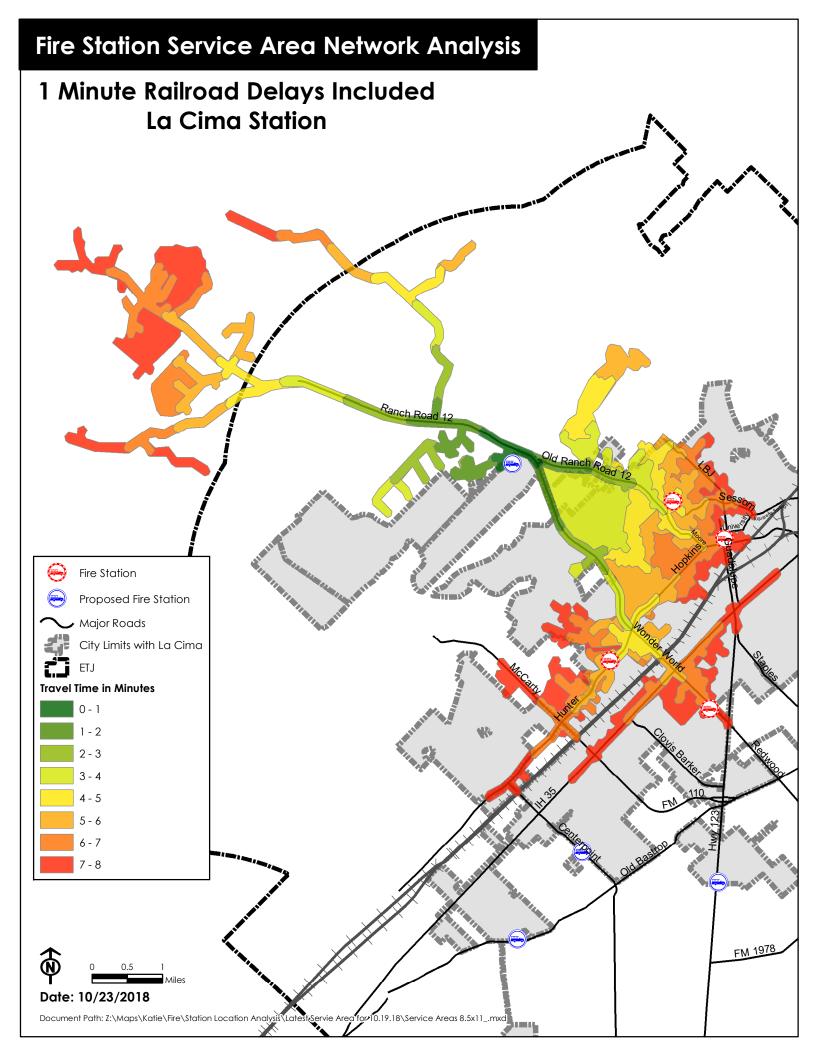
I appreciate the opportunity afforded me by The City of San Marcos and look forward to working with your community in the future.

Sincerely,

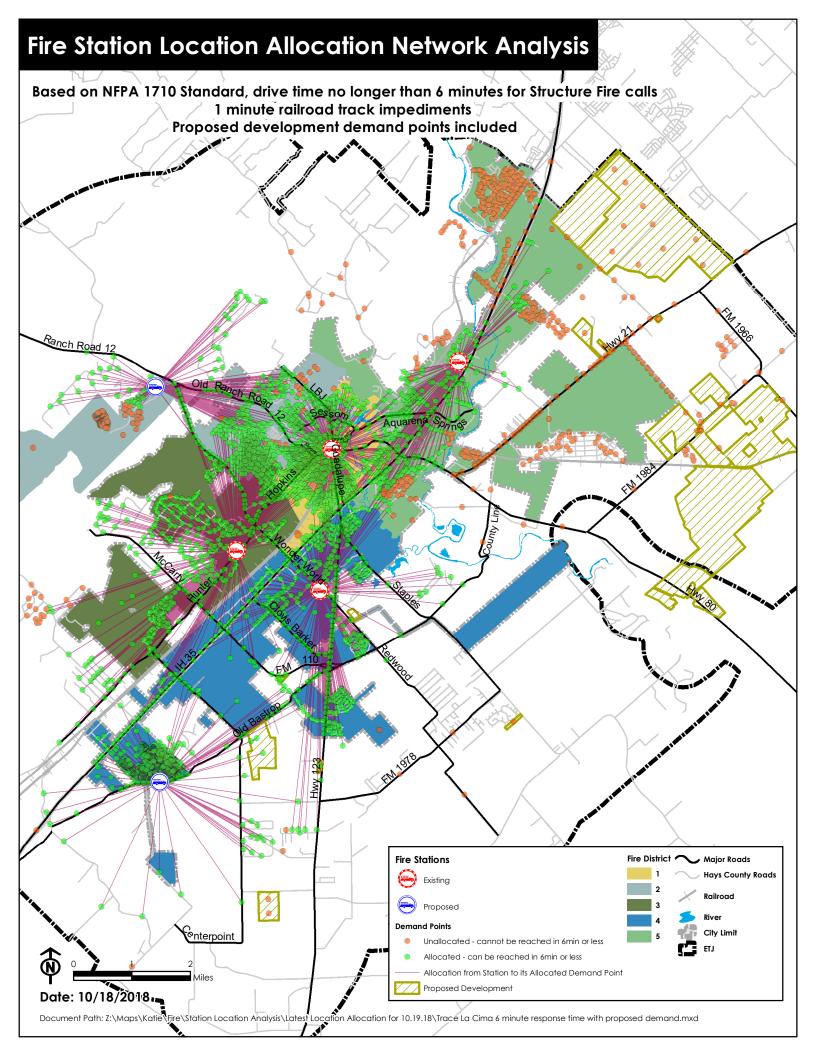
W. Michael Pietsch, P.E. Civil Engineer













Texas Fire Station Cost History Compiled October 2019

			Harris County Cy-Fair Fire Stations 16,000 SF Avg	City of Houston Fire Station 14,717 SF	Champion Fire Station 11,207 SF
	Description	Cost per SF AVG	Cost/SF	Cost/SF	
1	General Requirements	53.62	50.23	65.64	44.99
2	Interior Demolition	0.09	0.28	0.00	0.00
3	Sitework	65.34	61.20	78.26	56.56
4	Excavation	3.91	2.99	8.24	0.50
5	Building Structure	52.58	47.04	53.42	57.29
6	Exterior Masonry and Precast	12.73	19.00	10.51	8.68
7	Interior Masonry	10.59	11.47	11.02	9.28
8	Exterior Siding/Metal Panel	14.72	20.13	24.02	0.00
9	Interior Rough Carpentry	7.21	6.86	14.12	0.66
10	Finish Carpentry	7.06	9.39	11.60	0.19
11	Roofing	5.13	2.19	11.93	1.28
12	Caulking and Dampproofing	2.72	4.52	1.91	1.72
13	Doors, Frames and Hardware	11.74	21.54	10.59	3.09
14	Exterior Glass Systems	7.35	6.09	13.74	2.21
15	Interior Glass Systems	0.30	0.00	0.10	0.79
16	Exterior Framing Systems	11.23	6.63	26.57	0.50
17	Interior Plaster and Drywall Systems	7.16	6.33	2.55	12.59
18	Tile and Stone	2.98	4.72	4.23	0.00
19	Acoustic Ceilings and Treatment	1.80	2.31	1.07	2.02
20	Floor Coverings	2.65	3.92	3.90	0.14
21	Painting and Wall Coverings	3.55	2.47	4.90	3.29
22	Specialties	10.26	10.52	14.73	5.54
23	Equipment and Furnishings	8.34	4.54	13.43	7.04
24	Special Construction	11.11	1.90	20.85	10.57
25	Conveying Systems	0.34	1.03	0	0.00
26	Fire Protection	5.34	5.49	5.07	5.46
27	Plumbing	25.80	18.89	29.87	28.63
28	HVAC	36.63	38.44	54.72	16.74
29	Electrical	47.12	44.92	59.01	37.42
30	Low Voltage	11.79	14.92	17.33	3.13
	Subtotal 441.1		429.95	573.33	320.31
	Permits, Insurance, and Sub Guard	11.88	15.81	13.38	6.46
	Fee	8.16	9.72	6.53	8.23
	Construction Total	461.23	\$455.49	\$593.24	\$335.00



City of San Marcos

630 East Hopkins San Marcos, TX 78666

Legislation Text

File #: ID#19-681, Version: 1	
AGENDA CAPTION:	

Executive Session in accordance with the following Government Code Section(s):

- A. Section § 551.071 Consultation with Attorney: to receive a staff briefing and deliberate regarding the creation of Hays County Municipal Utility District No. 8. and to receive a staff briefing and deliberate regarding Martindale ETJ Matters.
- B. Section §551.087 Economic Development: to receive a staff briefing and deliberate regarding the creation of Hays County Municipal Utility District No. 8.
- C. Section § 551.074 Personnel Matters: to receive a staff briefing and hold discussion regarding the City Clerk position.

Meeting date: 11/6/2019

Department: City Clerk's Office on behalf of the City Council

Amount & Source of Funding

Funds Required: Click or tap here to enter text.

Account Number: Click or tap here to enter text.

Funds Available: Click or tap here to enter text.

Account Name: Click or tap here to enter text.

Fiscal Note:

Prior Council Action: Click or tap here to enter text.

<u>City Council Goal</u> : [Please select goal from dropdown menu below]
Choose an item.
Choose an item.
Choose an item.

<u>Comprehensive Plan Element (s)</u>: [Please select the Plan element(s) and Goal # from dropdown menu below]

☐ Economic Development - Choose an item.
☐ Environment & Resource Protection - Choose an item.
☐ Land Use - Choose an item.
☐ Neighborhoods & Housing - Choose an item.

☐ Parks, Public Spaces & Facilities - Choose an item.

File #: ID#19-681, Version: 1
☐ Transportation - Choose an item.
□ Not Applicable
Master Plan: [Please select the corresponding Master Plan from the dropdown menu below (if applicable)]
Choose an item.
Background Information:
Click or tap here to enter text.
Council Committee, Board/Commission Action:
Click or tap here to enter text.
Alternatives:
Click or tap here to enter text.

Recommendation:

Click or tap here to enter text.